

## CLAIMS

What is claimed is:

1. A method for forming a plurality of stores into a plurality of clusters, comprising:

5 collecting store specific information;

providing optimized combinations for each individual store based on the store specific information; and

creating a plurality of clusters based on the closeness of the optimal combinations.

10

2. The method, as recited in claim 1, further comprising providing cluster based combinations.

15 3. The method, as recited in claim 2, wherein the store specific information is selected from a group comprising point-of-sales data, customer survey data, and cost data.

20 4. The method, as recited in claim 3, wherein the combinations is selected from a group comprising item and price, assortment, and promotion combinations.

5. The method, as recited in claim 1, wherein the creating the plurality of clusters, comprises:

providing at least one constraint; and

5 placing stores that meet the constraints and with the closest optimal combinations in the same cluster of the plurality of clusters.

6. The method, as recited in claim 5, wherein the at least one constraint places two stores in the same cluster, by making each store of the two stores have the same optimal combination.

10

7. The method, as recited in claim 5, wherein the at least one constraint specifies a maximum number of clusters.

8. An apparatus for forming a plurality of stores into a plurality of clusters, comprising computer readable media, comprising:

15 computer code for collecting store specific information;

computer code for providing optimized combinations for each individual store based on the store specific information; and

20 computer code for creating a plurality of clusters based on the ~~closeness of the optimal combinations.~~

9. The apparatus, as recited in claim 8, further comprising computer code for providing cluster based combinations.

10. The apparatus, as recited in claim 9, wherein the store specific information is selected from a group comprising point-of-sales data, customer survey data, and cost data.

5

11. The apparatus, as recited in claim 10, wherein the combinations is selected from a group comprising item and price, assortment, and promotion combinations.

10

12. The apparatus, as recited in claim 8, wherein the computer code for creating the plurality of clusters, comprises:

computer code for providing at least one constraint; and

computer code for placing stores that meet the constraints and with the closest optimal combinations in the same cluster of the plurality of clusters.

15

13. The apparatus, as recited in claim 12, wherein the at least one constraint places two stores in the same cluster, by making each store of the two stores have the same optimal combination.

20

14. The apparatus, as recited in claim 12, wherein the at least one constraint specifies a maximum number of clusters.

15. A method for forming a plurality of stores into a plurality of clusters, comprising:

performing an optimization for the plurality of stores to obtain individual store prices;

- 5        using the individual store prices to create the plurality of clusters; and
- performing an optimization for the plurality of clusters to obtain cluster prices.

16. The method, as recited in claim 15, wherein the performing the optimization for the plurality of stores, comprises:

10        collecting point-of-sales data;

          modeling the point-of-sales data; and

          providing an optimization based on the modeled point of sales data.

15        17. The method, as recited in claim 16, wherein the using the individual store prices to create the plurality of clusters, comprises:

          providing at least one constraint; and

          placing stores that meet the constraints and with the closest individual store prices in the same cluster of the plurality of clusters.

18. The method, as recited in claim 17, wherein the at least one constraint prohibits two stores of the plurality of stores from being in the same cluster.

5 19. The method, as recited in claim 17, wherein the at least one constraint places two stores in the same cluster, by averaging the prices of an item and placing the average price as the price of the item in each store.

10 20. The method, as recited in claim 17, wherein the at least one constraint places stores with a geographical closeness in the same cluster.